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10/757,270	01/14/2004	Vincent Valentino Di Luoffo	AUS920030857US1	4137
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IBM CORP (AP)			BAYARD, DJENANE M	
C/O AMY PATTILLO				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.	DI LUOFFO ET AL.
10/757,270	
Examiner	Art Unit
Djenane M. Bayard	2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 14 January 2004.  
2a) This action is FINAL. 2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-31 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/14/04, 7/05/05, 8/25/06.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application  
6) Other: \_\_\_\_\_.

*Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 26-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035 (See Specification, paragraph [0029]).

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-6, 10-14, 17-19, 23-26, 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Fault-Tolerant Grid Architecture and Practice to Hai et al.

a. As per claim 1, Hai et al teaches a system for managing error analysis within a grid environment, comprising: a grid environment comprising a plurality of diverse systems (See abstract); and a first agent enabled to receive a plurality of types of error messages generated from said plurality of diverse systems within said grid environment (See page 428, *The local monitor maintains a slot table for all monitored processes. When a the local monitor detects the failure of a registered task, it will report the error status to local management component*); a parsing controller at said first agent for parsing each of said plurality of types of error messages to determine a general error indicator (See page 425, *Fault Tolerant Grid Platform, FTGP should detect component faults and adopt different fault handling strategies for different component types*) ; and a resolution controller at said first agent for attempting to resolve said general error indicator for each of said plurality of parsed error messages and return a solution to each of said plurality of error messages (See page 430, *If a local monitor reports an application failure to data collector, the handling center can receive such information and help to reconstruct the*

*application).*

b. As per claim 14, Hai et al teaches a method for managing error analysis within a grid environment, comprising: receiving, at a first agent, a plurality of types of error messages generated from a plurality of diverse systems within a grid environment (See page 428, *The local monitor maintains a slot table for all monitored processes. When a the local monitor detects the failure of a registered task, it will report the error status to local management component*); parsing each of said plurality of types of error messages to determine a general error indicator; and attempting to resolve said general error indicator for each of said plurality of parsed error messages (See page 425, Fault Tolerant Grid Platform, *FTGP should detect component faults and adopt different fault handling strategies for different component types*) and return a solution to each of said plurality of error messages, such that error analysis of a plurality of types of error messages in said grid environment is handled by said first agent rather than by said plurality of diverse systems (See page 430, *If a local monitor reports an application failure to data collector, the handling center can receive such information and help to reconstruct the application*).

c. As per claim 26, Hai et al teaches a computer program product for managing error analysis within a grid environment, comprising: a recording medium; means, recorded on said recording medium, for receiving, at a first agent, a plurality of types of error messages generated from a plurality of diverse systems within a grid environment (See page 428, *The local monitor maintains a slot table for all monitored processes. When a the local monitor detects the failure of a registered task, it will report the error status to local management component*); means,

recorded on said recording medium, for parsing each of said plurality of types of error messages to determine a general error indicator (See page 425, Fault Tolerant Grid Platform. *FTGP should detect component faults and adopt different fault handling strategies for different component types*); and means, recorded on said recording medium, for attempting to resolve said general error indicator for each of said plurality of parsed error messages and return a solution to each of said plurality of error messages (See page 430, *If a local monitor reports an application failure to data collector, the handling center can receive such information and help to reconstruct the application*).

d. As per claims 4 and 17, Hai et al teaches the claimed invention as described above. Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein said first agent is distributed across a selection of said plurality of diverse systems in said grid environment (See page 428 and figure 3).

e. As per claims 5 and 18, Hai et al teaches the claimed invention as described above. Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein said first agent is operable within at least one layer of a grid architecture for said grid environment (See page 425).

f. As per claims 6 and 19, Hai et al teaches the claimed invention as described above. Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein said at least one layer is functionally located above a network layer (See abstract).

g. As per claim 10, 23 and 30, Hai et al teaches the claimed invention as described above.

Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein said solution comprises at least one from among an adjustment of resource usage by a particular service, an explanation of a particular error message, and a recommendation of alternate resources (See page 428).

h. As per claim 11 and 24, Hai et al teaches the claimed invention as described above.

Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein said plurality of systems within said grid environment comprise at least one from among a client system, a resource node, and a grid manager (See abstract).

i. As per claims 12, 25 and 31, Hai et al teaches the claimed invention as described above.

Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, further comprising: a transmission controller for controlling transmission of said solution to a requester system in a transmission format specified for said requester system (See page 432).

j. As per claim 13, Hai et al teaches the claimed invention as described above.

Furthermore, Hai et al teaches a system for managing error analysis within a grid environment, wherein each of said plurality of types of error messages indicates the occurrence of a suboptimal condition within said grid environment (See page 424).

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 15-16 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fault-Tolerant Grid Architecture and Practice to Hai et al in view of U.S. Patent No. 6,594684 to Hodjat et al.

a. As per claims 2, 15 and 27, Hai et al teaches the claimed invention as described above. However, Hai et al fails to teach: a plurality of second agents accessible to said first agent, wherein said plurality of second agents specialize in resolving errors not resolvable by said first agent; and said resolution controller further comprising means for distributing each of said parsed error message to one from among said plurality of second agents.

Hodjat et al teaches a plurality of second agents accessible to said first agent, wherein said plurality of second agents specialize in resolving errors not resolvable by said first agent; and said resolution controller further comprising means for distributing each of said parsed error message to one from among said plurality of second agents (See col. 4, lines 57-64 and col. 5, lines 1-18)

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Hodjat in the claimed invention of Hai et al in order to provide adaptive search and retrieval of information (See col. 4, lines 36-37).

b. As per claims 3, 16 and 28 Hai et al in view of Hodjat et al teaches the claimed invention as described above. However, Hai et al fails to teach managing error analysis within a grid environment, further comprising: a plurality of third agents accessible to said plurality of second agent, wherein said plurality of third agents specialize in resolving errors not resolvable by said plurality of second agent.

Hodjat et al teaches managing error analysis within a grid environment, further comprising: a plurality of third agents accessible to said plurality of second agent, wherein said plurality of third agents specialize in resolving errors not resolvable by said plurality of second agent (See col. 4, lines 57-64 and col. 5, lines 1-18).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Hodjat in the claimed invention of Hai et al in order to provide adaptive search and retrieval of information (See col. 4, lines 36-37).

7. Claims 7, 9, 20, 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fault-Tolerant Grid Architecture and Practice to Hai et al in view of U.S. Patent Application No. 2003/0126240 to Vosseler.

a. As per claims 7, 20 and 29, Hai et al teaches the claimed invention as described above.

However, Hai et al fails to teach a for managing error analysis within a grid environment, wherein said parsing controller selects a particular policy according to said general error indicator from a plurality of policies and wherein said resolution controller to resolve said general error indicator according to said particular policy.

Vosseler teaches for managing error analysis within a grid environment, wherein said parsing controller selects a particular policy according to said general error indicator from a plurality of policies and wherein said resolution controller to resolve said general error indicator according to said particular policy (See page 3, paragraph [0026]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Vosseler in the claimed invention of Hai et al in order in order for the policy to tell the agent what to look for and what to do when an event occurs (See page 3, paragraph [0026]).

b. As per claims 9 and 22, Hai et al teaches the claimed invention as described above. However, Hai et al fails to teach a system for managing error analysis within a grid environment, wherein said resolution controller further comprises: means for accessing a service profile associated with said general error indicator; and means for adjusting usage of a selection of resources within said grid environment according to said service profile to resolve said general error indicator.

Vosseler teaches a system for managing error analysis within a grid environment, wherein said resolution controller further comprises: means for accessing a service profile

associated with said general error indicator; and means for adjusting usage of a selection of resources within said grid environment according to said service profile to resolve said general error indicator (See page 3, paragraph [0026]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Vosseler in the claimed invention of Hai et al in order in order for the policy to tell the agent what to look for and what to do when an event occurs (See page 3, paragraph [0026]).

8. Claims 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fault-Tolerant Grid Architecture and Practice to Hai et al in view of U.S. Patent Application No. 2003/0126240 to Vosseler as applied to claims 7 and 21 above, and further in view of U.S. Patent Application No. 7,086086 to Ellis.

a. As per claims 8 and 21, Hai et al in view of Vosseler teaches the claimed invention as described above. However, Hai et al in view of Vosseler fails to teach a system for managing error analysis within a grid environment, wherein said plurality of policies are validated against an XML document type definition.

Ellis teaches a system for managing error analysis within a grid environment, wherein said plurality of policies are validated against an XML document type definition (See col. 12, lines 13-26).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Ellis in the claimed invention of Hai et al in view of Vosseler in order for the agent to communicate with the host (See col. 12, lines 13-26).

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 7, 269757 to Lieblich et al teaches a distributed computer monitoring system and method for autonomous computer management.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878. The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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